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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/967,238	09/27/2001	Rongdian Fu	55525-8049.US00	6602

22918 7590 09/23/2003

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EXAMINER

LU, FRANK WEI MIN

ART UNIT

PAPER NUMBER

1634

DATE MAILED: 09/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/967,238

Applicant(s)

FU ET AL.

Examiner

Frank W Lu

Art Unit

1634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 18-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 26-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6/2003. 6) ☐ Other:

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of 1-17 and 26-28 filed on January 21, 2003 is acknowledged.

### ***Information Disclosure Statement***

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Claim Objections***

3. Claim 8 is objected to because of the following informalities: "said decoder labels" should be "said labeled decoder moiety" in order to make that claim 5 and claim 8 correspond each other.
4. Claim 26 is objected to because of the following informalities: "a given sequence" in (i) of step (a) should be "said given sequence" since "a given sequence" has appeared once.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-17 and 26-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 1 is rejected as vague and indefinite. In view of step (a) of the claim, the first part of the step (a) appears to indicate that a reference library does not hybridize with a first and a second probes while the second part of the step (a) appears to indicate that a reference library hybridizes with a first and a second probe. Therefore, the first part of the step (a) and the second part of the step (a) do not correspond each other. Please clarify.

8. Claim 1 recites the limitation “the respective populations” in step (a) of the claim. It appears that “the respective populations” in the content of claim means “the first nucleic acid population and the second nucleic acid population”. Since no phrase “a respective population” in the content of claim, the phrase “the respective populations” lacks antecedent basis for this limitation in the claim. Note that the phrase “at least two nucleic acid population” in preamble is not equal to “the respective populations” since the phrase “at least two nucleic acid population” can have more than two nucleic acid populations. Please clarify.

9. Claim 1 is rejected as vague and indefinite. Since the phrase “said first and the second probes” appears before “said probes” in the content of claim, it is unclear that “said probes” in (i) of step (a) mean said first probes or mean said second probes. Please clarify.

10. Claim 1 is rejected as vague and indefinite in view of the phrases “wherein said first and second probes are present in relative amounts proportional to the abundance of the nucleic acid sequence in the respective populations” and “such that said probes are present in duplexes in relative amounts proportional to the abundance of the nucleic acid sequence in the respective populations”. Since the content of the claim does not mention the relationship between “said first and second probes” and “the abundance of the nucleic acid sequence”, it is unclear what this phrase means. Please clarify.

11. Claim 2 is rejected as vague and indefinite in view of step (a) of claim 1 and claim 2. Since step (a) of claim 1 only requires a first probe from a first nucleic acid population and a second probe from a second nucleic acid population while claim 2 requires a plurality of probes derived from said first population and a plurality of probes derived from said second population, claim 1 and claim 2 do not correspond each other and claim 2 does not further limit claim 1. Furthermore, it is unclear that a first nucleic acid population in claim 1 is equal to said first population in claim 2 and a second nucleic acid population in claim 1 is equal to said second population in claim 2. Please clarify.

12. Claims 16 and 17 are rejected as vague and indefinite in view of step (a) of claim 1 and claims 16 and 17. Since claim 1 have the phrases “at least two nucleic acid populations”, “a first nucleic acid population” and “a second nucleic acid population”, it is unclear which above population means said populations recited in claims 16 and 17. Please clarify.

13. Claim 26 recites the limitations of “said first population” and “said second population” in the step (a) of the claim. There is insufficient antecedent basis for this limitation in the claim since there is no “a first population” and “a second population” in the claim. Note that “at least

two nucleic acid populations” in preamble of the claim is different from “said first population” and “said second population” since “at least two nucleic acid populations” can have more than two nucleic acid populations. Please clarify.

14. Claim 26 recites the limitations of “said first probe” and “said second probe” in the step (a) of the claim. There is insufficient antecedent basis for this limitation in the claim since there is no “a first probe” or “a second probe” in the claim. Please clarify.

15. Claim 26 is rejected as vague and indefinite. In view of step (a) of the claim, the first part of the step (a) appears to indicate that a reference library does not hybridize with two different probes while the second part of the step (a) appears to indicate that a reference library hybridizes with two different probes. Therefore, the first part of the step (a) and the second part of the step (a) do not correspond each other. Please clarify.

16. Claim 26 recites the limitation “the respective populations” in step (a) of the claim. It appears that “the respective populations” in the content of claim means “said first population and said second population”. Since no phrase “a respective population” in the content of claim, the phrase “the respective populations” lacks antecedent basis for this limitation in the claim. Note that the phrase “at least two nucleic acid population” in preamble is not equal to “the respective populations” since the phrase “at least two nucleic acid population” can have more than two nucleic acid populations. Please clarify.

17. Claim 26 is rejected as vague and indefinite. Since the phrase “said first and the second probes” appears before “said probes” in the content of claim, it is unclear that “said probes” in (i) of step (a) mean said first probes or mean said second probes. Please clarify.

18. Claim 26 is rejected as vague and indefinite in view of the phrases “wherein said first and second probes having a given sequence, exclusive of the SID sequence, are present in relative amounts proportional to the abundance of said sequence in the respective populations” and “such that said probes of a given sequence are present in duplexes in relative amounts proportional to the abundance of that nucleic acid sequence in the respective populations” Since the content of the claim does not mention the relationship between “said first and second probes” and “the abundance of said sequence”, it is unclear what this phrase means. Furthermore, it is unclear that “said sequence” in the phrase represents a reference library sequence or a given sequence and it is unclear that “the SID sequence” represents a terminal first sample ID sequence or a terminal second sample ID sequence. Please clarify.

19. Claim 26 recites the limitation “said microparticles” in step (c) of the claim. There is insufficient antecedent basis for this limitation in the claim since there is no “microparticles” in the claim.

### ***Conclusion***

20. No claim is allowed.


21. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CAR § 1.6(d)). The CM Fax Center number is either (703) 308-4242 or (703)305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Lu, Ph.D., whose telephone number is (703) 305-1270. The examiner can normally be reached on Monday-Friday from 9 A.M. to 5 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones, can be reached on (703) 308-1152.

Any inquiry of a general nature or relating to the status of this application should be directed to the patent Analyst of the Art Unit, Ms. Chantae Dessau, whose telephone number is (703) 605-1237.

Frank Lu  
September 22, 2003



**ETHAN WHISENANT**  
**PRIMARY EXAMINER**